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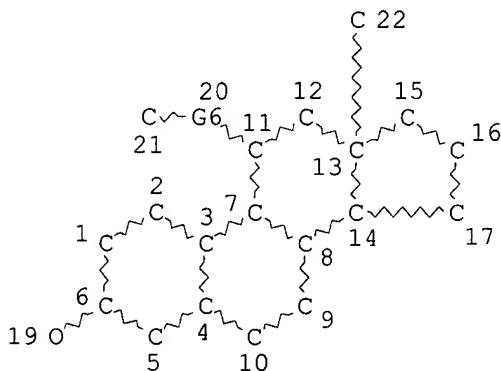
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FILE COVERS 1907 - 31 Mar 2003 VOL 138 ISS 14  
 FILE LAST UPDATED: 30 Mar 2003 (20030330/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

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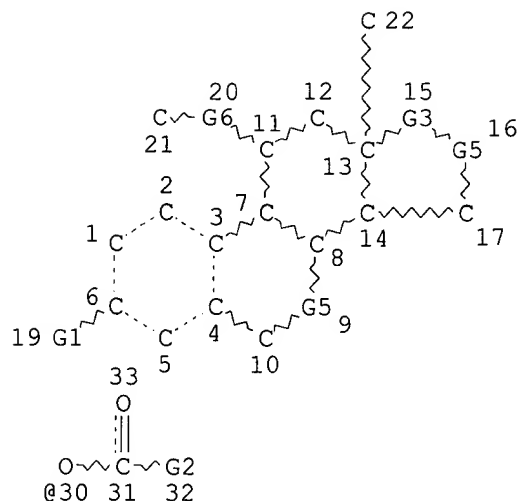


REP G6=(4-8) C  
 NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 21

STEREO ATTRIBUTES: NONE  
 L5 303 SEA FILE=REGISTRY SSS FUL L3  
 L6 STR

*Antecedent*  
 2/10/1



CH~G4  
@23 24

HO~CH  
25 @26

HO~C~G4  
27 @28 29

VAR G1=OH/30  
VAR G2=ME/ET/I-PR/N-PR/I-BU/N-BU/T-BU/S-BU/CY  
VAR G3=26/28  
VAR G4=AK/CY  
VAR G5=CH2/23  
REP G6=(4-8) C  
NODE ATTRIBUTES:  
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DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 32

STEREO ATTRIBUTES: NONE  
L7 115 SEA FILE=REGISTRY SUB=L5 SSS FUL L6  
L8 12 SEA FILE=HCAPLUS ABB=ON PLU=ON L7

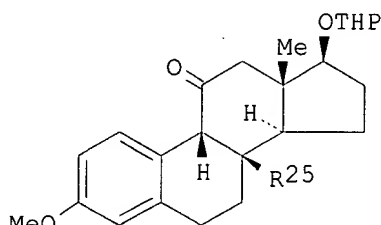
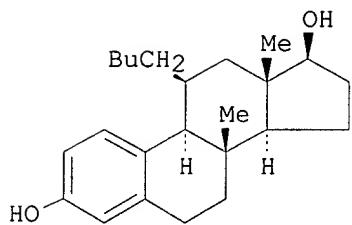
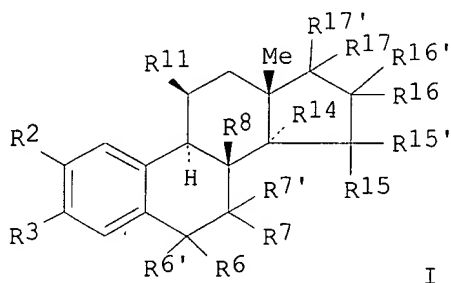
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=> d ibib abs hitrn 18 1-12

L8 ANSWER 1 OF 12 HCAPLUS COPYRIGHT 2003 ACS  
ACCESSION NUMBER: 2001:763026 HCAPLUS  
DOCUMENT NUMBER: 135:318607  
TITLE: Preparation of 8.beta.-substituted-11.beta.-pentyl-  
and 11.beta.-hexyl-estra-1,3,5(10)-triene derivatives  
which have an affinity for the estrogen receptor  
INVENTOR(S): Peters, Olaf; Braeuer, Nico; Hillisch, Alexander;  
Hegele-Hartung, Christa; Fritzemeier, Karl-Heinrich  
PATENT ASSIGNEE(S): Schering Aktiengesellschaft, Germany  
SOURCE: PCT Int. Appl., 53 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

| PATENT NO. | KIND | DATE  | APPLICATION NO. | DATE  |
|------------|------|-------|-----------------|-------|
| -----      | ---- | ----- | -----           | ----- |

WO 2001077138 A1 20011018 WO 2001-EP4289 20010412  
 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CO, CR, CU, CZ, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 DE 10019167 A1 20011018 DE 2000-10019167 20000412  
 EP 1272505 A1 20030108 EP 2001-940331 20010412  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR  
 NO 2002004907 A 20021205 NO 2002-4907 20021011  
 PRIORITY APPLN. INFO.: DE 2000-10019167 A 20000412  
 US 2000-207370P P 20000526  
 WO 2001-EP4289 W 20010412  
 OTHER SOURCE(S): MARPAT 135:318607  
 GI



AB The present invention relates to the novel 8.beta.-substituted estra-1,3,5(10)-trienes I [R2 = H, F, Cl, Br, I, straight or branched (un)satd. C1-6-alkyl, OH, alkoxy, acyloxy, CF3, sulfamoyloxy; R3 = alkoxy, sulfamoyloxy, acyloxy; R6, R6' = H; R6R7 = bond; R7, R7' = H; R8 means a straight-chain or branched-chain, optionally partially or entirely halogenated alkyl or alkenyl radical having up to 5 carbon atoms, an ethynyl or prop-1-ynyl radical; R11 = pentyl, hexyl; R14 = H; R14R15 = bond; R15 = H; R15', R16' = H, F, Cl, Br, I, alkoxy, sulfamoyloxy, acyloxy; R15R16 = bond; R16 = H; R17, R17' = H, H and halogen, H and OCH2Ph, H and sulfamoyloxy; alkyl and acyl or acyloxy; alkoxy and alkyl, alkoxy and acyloxy; R17R17' = CH2 CR23R24; R23, R24 = H, halogen; R23R24 = O]. Thus, 8.beta.-methyl-11.beta.-pentyl-1,3,5(10)-triene-3,17.beta.-diol (II) was prepd. from 8.beta.-cyanosteroid III (R25 = CN) via condensation of 11-ketosteroid III (R25 = Me) with BuCH2Li. Estradienes I are used as pharmaceutical active agents which, in vitro, are provided with a higher

affinity of estrogen receptor preps. of rat prostate than of estrogen receptor preps. of rat uterus and, in vivo, preferably act in a preferential contraceptive manner on the ovary without stimulating the uterus. The invention also relates to the prodn. thereof, the therapeutic use thereof and pharmaceutical administration forms which contain the novel compds. I. The invention further relates to the use of compds. I for male contraception and to the use of non-malignant or malignant proliferate diseases of the ovary, such as ovarian carcinoma or granulosa cell tumors for instance.

IT 367269-66-7P, 8.beta.-Methyl-11.beta.-pentylestra-1,3,5(10)-triene-3,17.beta.-diol 367269-67-8P, 11.beta.-Hexyl-8.beta.-methylestra-1,3,5(10)-triene-3,17.beta.-diol 367269-79-2P, 11.beta.-Pentyl-8.beta.-vinylestra-1,3,5(10)-triene-3,17.beta.-diol 367269-80-5P, 11.beta.-Hexyl-8.beta.-vinylestra-1,3,5(10)-triene-3,17.beta.-diol 367269-81-6P, 8.beta.-Ethyl-11.beta.-pentyl-1,3,5(10)-triene-3,17.beta.-diol 367269-82-7P, 8.beta.-Ethyl-11.beta.-hexyl-1,3,5(10)-triene-3,17.beta.-diol 367269-89-4P, 8.beta.-Methyl-11.beta.-pentyl-1,3,5(10)-triene-3,17.beta.-diol 3-acetate 367269-90-7P, 8.beta.-Ethyl-11.beta.-pentyl-1,3,5(10)-triene-3,17.beta.-diol 3-acetate 367269-91-8P, 11.beta.-Pentyl-8.beta.-vinyl-1,3,5(10)-triene-3,17.beta.-diol 3-acetate 367269-92-9P, 11.beta.-Hexyl-8.beta.-methyl-1,3,5(10)-triene-3,17.beta.-diol 3-acetate 367269-93-0P, 8.beta.-Ethyl-11.beta.-hexyl-1,3,5(10)-triene-3,17.beta.-diol 3-acetate 367269-94-1P, 11.beta.-Hexyl-8.beta.-vinyl-1,3,5(10)-triene-3,17.beta.-diol 3-acetate  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of 8.beta.-substituted-11.beta.-pentyl- and -11.beta.-hexyl-estra-1,3,5(10)-triene derivs. which have an affinity for the estrogen receptor)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2001:435020 HCAPLUS

DOCUMENT NUMBER: 135:19815

TITLE: Preparation of anti-estrogen compounds having hydroxycarbonyl-halogenoalkyl side chain  
 INVENTOR(S): Jo, Jaechon; Kwon, Heean; Lim, Hyunsuk; Choi, Jaeyoung; Morikawa, Kazumi; Kanbe, Yoshitake; Nishimoto, Masahiro; Kim, Myunghwa; Nishimura, Yoshikazu

PATENT ASSIGNEE(S): C + C Research Laboratories, S. Korea

SOURCE: PCT Int. Appl., 139 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.    | KIND   | DATE     | APPLICATION NO. | DATE     |
|---------------|--|----------|-----------------|----------|
| WO 2001042186 | A1   | 20010614 | WO 2000-JP8810  | 20001213 |
| W:            | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM |          |                 |          |
| RW:           | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG   |          |                 |          |

|   |    |          |                  |             |
|---|----|----------|------------------|-------------|
| AU 2001018883   | A5 | 20010618 | AU 2001-18883    | 20001213    |
| EP 1241158  | A1 | 20020918 | EP 2000-981681   | 20001213    |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR |    |          |                  |             |
| JP 3357356  | B2 | 20021216 | JP 2001-54388    | 20001213    |
| JP 2003040834   | A2 | 20030213 | JP 2002-199200   | 20001213    |
| NO 2002002783   | A  | 20020813 | NO 2002-2783     | 20020611    |
| PRIORITY APPLN. INFO.:  |    |          | JP 1999-353640   | A 19991213  |
|   |    |          | JP 2000-100567   | A 20000403  |
|   |    |          | JP 2000-186684   | A 20000621  |
|   |    |          | JP 2000-232091   | A 20000731  |
|   |    |          | JP 2000-357793   | A 20001124  |
|   |    |          | JP 2001-543488   | A3 20001213 |
|   |    |          | WO 2000-JP8810   | W 20001213  |
| OTHER SOURCE(S):  |    |          | MARPAT 135:19815 |             |
| GI  |    |          |                  |             |

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Compds. in which either a compd. having reduced oral activity or a group having a framework thereof is chem. bonded to a group represented by the general formula (CH<sub>2</sub>)<sub>m</sub>CH(CO<sub>2</sub>R<sub>1</sub>)(CH<sub>2</sub>)<sub>n</sub>R<sub>2</sub> (wherein R<sub>1</sub> represents hydrogen, metal forming a salt; R<sub>2</sub> represents linear or branched C<sub>1</sub>-7 halogenoalkyl; m is an integer of 2 to 14; and n is an integer of 2 to 7), optical isomers of the compds.; or hydrates or pharmacol. acceptable salts of these compds. are prepd. When imparted to a framework of, e.g., estradiol Q or Q<sub>1</sub>, 2-(p-hydroxyphenyl)-6-naphthol Q<sub>2</sub>, or 2-(4-hydroxyphenyl)-2-(4-hydroxybenzoyl)-6-hydroxybenzo[b]thiophene Q<sub>3</sub>, etc., a compd. having anti-estrogen activity, those compds. represented by formula A-(CH<sub>2</sub>)<sub>m</sub>CH(CO<sub>2</sub>R<sub>1</sub>)(CH<sub>2</sub>)<sub>n</sub>R<sub>2</sub> (A = Q, Q<sub>1</sub>, Q<sub>2</sub>, Q<sub>3</sub>, etc.), a compd. having anti-estrogen activity, those can have significantly improved oral activity. The compds. are hence useful as antitumor agents, in particular for the treatment of breast cancer. Thus, cross-metathesis of 3-methoxy-7.alpha.-(2-propenyl)estra-1,3,5(10)-trien-17.beta.-ol with (4R,5S)-3,4-dimethyl-1-[(2S)-2-(4,4,5,5,6,6,7,7,7-nonafluoroheptyl)-8-nonenoyl]-5-phenylimidazolidin-2-one in the presence of Grubbs' catalyst followed by hydrogenation oxidative hydrolysis, and demethylation gave (2S)-10-(3,17.beta.-dihydroxyestra-1,3,5(10)-trien-7.alpha.-yl)-2-(4,4,5,5,6,6,7,7,7-nonafluoroheptyl)decanoic acid (I). I at 10 mg/kg p.o. per day for 3 days inhibited by 100% the 17.beta.-estradiol benzoate-stimulated increase in the uterus wt. in mice.

IT 342898-68-4P 342898-92-4P 342898-96-8P

342898-97-9P 342898-98-0P 342898-99-1P

342899-00-7P 342899-25-6P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of anti-estrogen compds. having hydroxycarbonyl-haloalkyl side chain as antitumor agents for treatment of breast cancer with improved oral activity)

IT 342898-67-3P 342898-91-3P 342899-24-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of anti-estrogen compds. having hydroxycarbonyl-haloalkyl side chain as antitumor agents for treatment of breast cancer with improved oral activity)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2001:190285 HCAPLUS  
 DOCUMENT NUMBER: 134:261332  
 TITLE: QSAR with electrotopological state atom index.  
 Part-3a. Receptor binding affinity of estrogens and  
 non-steroidal estrogen analogs  
 AUTHOR(S): Saha, Achintya; Roy, Kunal; De, Kakali; Sengupta,  
 Chandana  
 CORPORATE SOURCE: Dep. Chemical Technology, Univ. Calcutta, alcutta, 700  
 009, India  
 SOURCE: Journal of the Indian Chemical Society (2001), 78(2),  
 92-97  
 CODEN: JICSAH; ISSN: 0019-4522  
 PUBLISHER: Indian Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB Quant. structure activity relationship (QSAR) anal. of estrogens and  
 non-steroidal analogs of estrogen with electrotopol. state atom (ETSA)  
 index has been performed to explore the atoms or fragments of the mols.  
 that are most important for the binding affinity to receptor. The study  
 reveals the importance of Ph ring fragment (C1, C5 and C10 atoms of  
 steroidal estrogen, and C1, C3, C4, C9 and C10 atoms in case of  
 non-steroidal analogs) for receptor binding affinity. The importance of  
 these atoms or fragments is also supported from the literature survey.  
 Thus, the Ph ring constitutes the pharmacophore for receptor binding  
 affinity of estrogen analogs. Hence, diagnostic potential of the ETSA  
 scheme in identifying the atoms or fragments important for activity is  
 revealed from the study.

IT 134411-55-5 134411-57-7

RL: BAC (Biological activity or effector, except adverse); BPR (Biological  
 process); BSU (Biological study, unclassified); PRP (Properties); BIOL  
 (Biological study); PROC (Process)

(QSAR with electrotopol. state atom index in relation to receptor  
 binding affinity of estrogens and non-steroidal estrogen analogs)

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:909685 HCAPLUS  
 DOCUMENT NUMBER: 134:56837  
 TITLE: Methods for the production of long-chain substituted  
 estratriene and their application in the preparation  
 of medicaments  
 INVENTOR(S): Sauer, Gerhard; Bohlmann, Rolf; Heinrich, Nikolaus;  
 Kroll, Jorg; Zorn, Ludwig; Fritzmeier, Karl-Heinrich;  
 Hegele-Hartung, Christa; Hoffmann, Jens; Lichtner,  
 Rosemarie  
 PATENT ASSIGNEE(S): Schering A.-G., Germany  
 SOURCE: Ger. Offen., 16 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.    | KIND | DATE     | APPLICATION NO.  | DATE     |
|---------------|------|----------|------------------|----------|
| DE 19929715   | A1   | 20001228 | DE 1999-19929715 | 19990624 |
| WO 2001000652 | A2   | 20010104 | WO 2000-EP5969   | 20000626 |
| WO 2001000652 | A3   | 20010510 |                  |          |

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 IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
 MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK,

SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ,  
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 CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 2000061524 A5 20010131 AU 2000-61524 20000626

EP 1187846 A2 20020320 EP 2000-947882 20000626

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
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JP 2003503419 T2 20030128 JP 2001-507059 20000626

NO 2001006330 A 20020131 NO 2001-6330 20011221

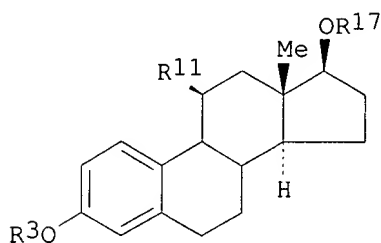
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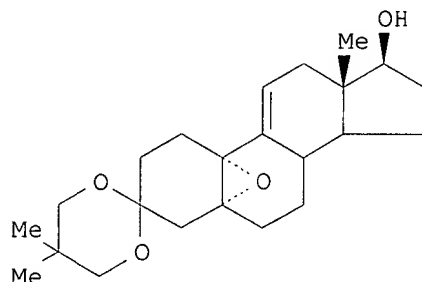
WO 2000-EP5969 W 20000626

OTHER SOURCE(S): MARPAT 134:56837

GI



I



II

AB This invention describes the synthesis of new antiestrogenic 11.beta. long-chain substituted estratriene [I; R3 = H, alkyl, R3'C(O); R3' = H, alkyl, ph; R11 = ABZR20; A = bond, phenylene, phenyleneoxy; B = alkylene, alkenylene, alkynylene; Z = NR21; R21 = alkyl; R20 = H, alkyl, alkenyl, -alkynyl, DCnFn+1; D = aryl, alkylene, alkenylene, alkynylene; n = 1 - 8; R20 = LCH=CF CpF2p+1; L = alkylene, alkenylene, alkynylene; p = 2-7; R20 = DO(CH2)q-aryl; q = 0 - 3; aryl = Ph, 1-naphthyl, 2-naphthyl, heteroaryl; DO(CH2)rCnF2n+1; r = 1 - 5; R20R21 with N = C5-C6-heterocycle; R20R21 with N = heterocycle etc.; R17 = H, R17'C(O); R17' = H, alkyl] for the prodn. of medicaments. Thus, I [R3, R17 = H; R11 = F5C2(CH2)3S(CH2)3N(Me)(CH2)5] was prep'd. from epoxyestrene (II) via reaction with 1-bromo-5-tert-butyltrimethylsilyloxypentane, aromatization, chlorination and amination with methyl(3-[(4,4,5,5,5-pentafluoropentyl)sulfanyl]propyl)amine. Formulations of I (no data) are claimed.

IT 314019-28-8P 314019-30-2P 314019-32-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(prepn. of long-chain substituted estratriene and their application in the prep'n. of medicaments)

IT 151555-65-6P 314019-26-6P 314019-27-7P  
 314019-29-9P 314019-31-3P 314019-33-5P  
 314019-58-4P 314019-59-5P 314019-60-8P  
 314019-61-9P 314019-62-0P 314019-63-1P  
 314019-64-2P 314019-65-3P 314019-66-4P  
 314019-67-5P 314019-68-6P 314019-69-7P  
 314019-70-0P 314019-71-1P 314019-72-2P  
 314019-73-3P 314019-74-4P 314019-75-5P  
 314019-76-6P 314019-77-7P 314019-78-8P  
 314019-79-9P 314019-80-2P 314019-81-3P  
 314019-82-4P 314019-83-5P 314019-84-6P  
 314019-85-7P 314019-86-8P 314019-87-9P

314019-88-0P 314019-89-1P 314019-90-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of long-chain substituted estratriene and their application in the prepn. of medicaments)

IT 314019-42-6P 314019-43-7P 314019-45-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of long-chain substituted estratriene and their application in the prepn. of medicaments)

L8 ANSWER 5 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 2000:368399 HCAPLUS

DOCUMENT NUMBER: 133:4848

TITLE: Preparation of estrogenic estra-1,3,5(10)-trienes with differential effects on the .alpha. and .beta. estrogen receptors, having a linear hydrocarbon chain of from 5-9 carbon atoms in position 11

INVENTOR(S): Loozen, Hubert Jan Jozef; Schoonen, Wilhelmus Gerardus Eduardus Joseph

PATENT ASSIGNEE(S): Akzo Nobel N.V., Neth.

SOURCE: PCT Int. Appl., 24 pp.

CODEN: PIXXD2

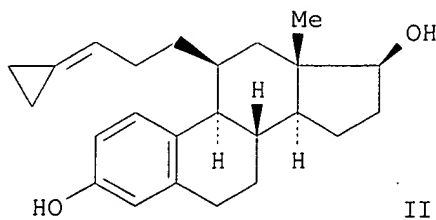
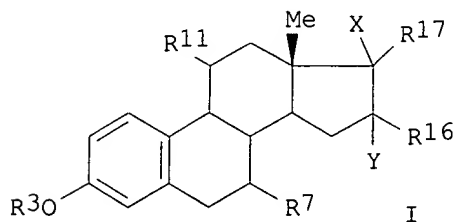
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|---|------|----------|-----------------|----------|
| WO 2000031112   | A1   | 20000602 | WO 1999-EP9053  | 19991118 |
| W: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GE, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM |      |          |                 |          |
| RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  |      |          |                 |          |
| EP 1131336  | A1   | 20010912 | EP 1999-963327  | 19991118 |
| EP 1131336  | B1   | 20020828 |                 |          |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO   |      |          |                 |          |
| AT 222922   | E    | 20020915 | AT 1999-963327  | 19991118 |
| PRIORITY APPLN. INFO.: EP 1998-203914 A 19981120  |      |          |                 |          |
| WO 1999-EP9053 W 19991118   |      |          |                 |          |
| OTHER SOURCE(S): MARPAT 133:4848  |      |          |                 |          |
| GI  |      |          |                 |          |



AB Novel 11.beta.-substituted estradiols of formula I [R<sup>3</sup> = H, acyl, aroyl; R<sup>7</sup>, R<sup>16</sup>, R<sup>17</sup> = H, alkyl, cycloalkyl, alkenyl, alkynyl, aryl; R<sup>11</sup> = linear



or branched hydrocarbon chain; X, Y = H, OH] are prepd. The resulting compds. have a desirable mixed agonist/antagonist profile for estrogen receptor .alpha. and estrogen receptor .beta.. Thus, II was prepd. and was an agonist for ER.alpha. and an antagonist for ER.beta..

IT 271259-96-2P 271260-03-8P 271260-07-2P  
271260-09-4P 271260-12-9P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(prepn. of estrogenic 11-substituted estratrienes with differential effects on estrogen receptors)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 6 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:576677 HCAPLUS

DOCUMENT NUMBER: 127:171883

TITLE: Method of treating alopecia

INVENTOR(S): Smart, Robert C.; Oh, Hye-sun

PATENT ASSIGNEE(S): North Carolina State University, USA; Smart, Robert C.; Oh, Hye-Sun

SOURCE: PCT Int. Appl., 39 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| PATENT NO.             | KIND   | DATE     | APPLICATION NO.   | DATE     |
|------------------------|--|----------|-------------------|----------|
| WO 9730697             | A1   | 19970828 | WO 1997-US2385    | 19970218 |
| W:                     | AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM |          |                   |          |
| RW:                    | KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG   |          |                   |          |
| CA 2247258             | AA   | 19970828 | CA 1997-2247258   | 19970218 |
| AU 9720513             | A1   | 19970910 | AU 1997-20513     | 19970218 |
| AU 725243              | B2   | 20001012 |                   |          |
| EP 938296              | A1   | 19990901 | EP 1997-908659    | 19970218 |
| R:                     | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI   |          |                   |          |
| JP 2000505454          | T2   | 20000509 | JP 1997-530248    | 19970218 |
| US 6204258             | B1   | 20010320 | US 1999-257396    | 19990225 |
| PRIORITY APPLN. INFO.: |  |          | US 1996-604448 A1 | 19960221 |
|                        |  |          | WO 1997-US2385 W  | 19970218 |

OTHER SOURCE(S): MARPAT 127:171883

AB A method of enhancing hair growth or treating alopecia in a subject uses topically administered estrogen receptor antagonists. Within 3 wk, topical application of the estrogen receptor antagonist ICI 182780 (10 nmol, twice weekly) induced full hair regrowth on clipped dorsal skin of 60% of the treated mice, as compared to 40% of the vehicle only treated mice.

IT 134411-55-5

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(alopecia treatment with estrogen receptor antagonists)

L8 ANSWER 7 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1997:435821 HCAPLUS  
 DOCUMENT NUMBER: 127:76140  
 TITLE: Steroidal Affinity Labels of the Estrogen Receptor. 3. Estradiol 11.beta.-n-Alkyl Derivatives Bearing a Terminal Electrophilic Group: Antiestrogenic and Cytotoxic Properties  
 AUTHOR(S): Lobaccaro, Carole; Pons, Jean-Francois; Duchesne, Marie-Josephe; Auzou, Gilles; Pons, Michel; Nique, Francois; Teutsch, Georges; Borgna, Jean-Louis  
 CORPORATE SOURCE: INSERM Unite 439, Montpellier, 34090, Fr.  
 SOURCE: Journal of Medicinal Chemistry (1997), 40(14), 2217-2227  
 CODEN: JMCMAR; ISSN: 0022-2623  
 PUBLISHER: American Chemical Society  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English

AB With the aim of developing a new series of steroidal affinity labels of the estrogen receptor, six electrophilic 11.beta.-Et (C2), 11.beta.-Bu (C4), or 11.beta.-decyl (C10) derivs. of estradiol bearing 11.beta.-terminal electrophilic functionalities, i.e. bromine (C4), (methylsulfonyl)oxy (C2 and C4), bromoacetamido (C2 and C4), and (p-tolylsulfonyl)oxy (C10) were synthesized. The range of their affinity consts. for binding the estrogen receptor was 0.4-37% that of estradiol; the order of increasing affinity (i) relative to the 11.beta.-alkyl arm was Et < Bu and (ii) relative to the electrophilic functionalities was bromoacetamido < bromine < (methylsulfonyl)oxy. Regardless of the conditions used, including prolonged exposure of the receptor to various pH levels (7-9) and temps. (0-25.degree.), the extent of receptor affinity labeling by the 11.beta.-Et and 11.beta.-Bu compds., if any, was under 10%. This was in sharp contrast to results obtained using 11.beta.-((tosyloxy)decyl)estradiol which labeled from 60% to 90% of the receptor hormone-binding sites with an EC50 of .apprx.10 nM. Estrogenic and antiestrogenic activities of the compds. were detd. using the MVLN cell line, which was established from the estrogen-responsive mammary tumor MCF-7 cells by stable transfection of a recombinant estrogen-responsive luciferase gene. The two 11.beta.-Et compds. were mainly estrogenic, whereas the three 11.beta.-Bu and the 11.beta.-decyl compds. essentially showed antiestrogenic activity. The fact that the chem. reactivities of 11.beta.-Et and 11.beta.-Bu compds. were not compromised by interaction with the estrogen receptor made the synthesized high-affinity compds. potential cytotoxic agents which might be able to exert either (i) a specific action on estrogen-regulated genes or (ii) a more general action in estrogen-target cells. Therefore the ability of the compds. (1) to irreversibly abolish estrogen-dependent expression of the luciferase gene and (2) to affect the proliferation of MVLN cells was detd. All electrophiles were able to irreversibly suppress expression of the luciferase gene; the antiestrogenic electrophiles were more potent than the estrogenic ones but less efficient than 4-hydroxytamoxifen, a classical and chem. inert triphenylethylene antiestrogen. Only the antiestrogenic electrophiles decreased cell proliferation; however, they were less potent than 4-hydroxytamoxifen. In conclusion, the synthesized electrophilic estradiol 11.beta.-Et and 11.beta.-Bu derivs. (i) were not efficient affinity labels of the estrogen receptor and (ii) did not display significant cytotoxicity in estrogen-sensitive mammary tumor cells. However, since these derivs. displayed high affinity for the estrogen receptor, they could be used to prep. potential cytotoxic agents which might be selective for tumors affecting estrogen-target tissues, by coupling them with a toxic moiety.

IT 191486-92-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

10  
Carbons  
X

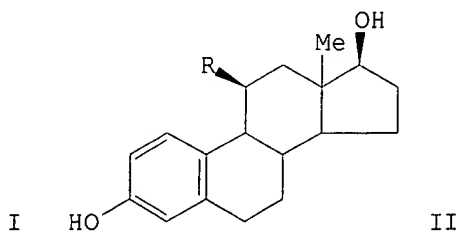
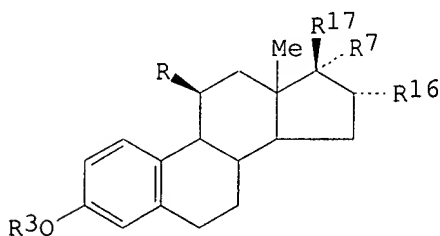
(prepn. of estradiol 11.beta.-n-alkyl derivs. as steroidal affinity labels of the estrogen receptor)

L8 ANSWER 8 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1994:31023 HCAPLUS  
 DOCUMENT NUMBER: 120:31023  
 TITLE: Preparation of 11.beta.-thiahydrocarbyl-19-norsteroids and analogs as drugs  
 INVENTOR(S): Claussner, Andre; Nique, Francois; Teutsch, Jean Georges; Van de Velde, Patrick  
 PATENT ASSIGNEE(S): Roussel-UCLAF, Fr.  
 SOURCE: PCT Int. Appl., 82 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE        |
|--|------|----------|-----------------|-------------|
| WO 9313123   | A1   | 19930708 | WO 1992-FR1193  | 19921217    |
| W: AU, CA, FI, HU, JP, KR, NZ, RU, US                              |      |          |                 |             |
| RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE |      |          |                 |             |
| FR 2685332   | A1   | 19930625 | FR 1991-15856   | 19911220    |
| FR 2685332   | B1   | 19950602 |                 |             |
| IL 104105  | A1   | 19970713 | IL 1992-104105  | 19921215    |
| AU 9333570   | A1   | 19930728 | AU 1993-33570   | 19921217    |
| AU 666916  | B2   | 19960229 |                 |             |
| EP 623140  | A1   | 19941109 | EP 1993-902339  | 19921217    |
| EP 623140  | B1   | 19980422 |                 |             |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE  |      |          |                 |             |
| HU 68068   | A2   | 19950529 | HU 1994-2134    | 19921217    |
| HU 221482  | B    | 20021028 |                 |             |
| AT 165365  | E    | 19980515 | AT 1993-902339  | 19921217    |
| RU 2111213   | C1   | 19980520 | RU 1994-31162   | 19921217    |
| ES 2115754   | T3   | 19980701 | ES 1993-902339  | 19921217    |
| ZA 9209859   | A    | 19931220 | ZA 1992-9859    | 19921218    |
| CN 1075722   | A    | 19930901 | CN 1992-115248  | 19921219    |
| CN 1036718   | B    | 19971217 |                 |             |
| US 6281204   | B1   | 20010828 | US 1994-244735  | 19940609    |
| FI 9402944   | A    | 19940617 | FI 1994-2944    | 19940617    |
| US 2002072624  | A1   | 20020613 | US 2001-891433  | 20010626    |
| PRIORITY APPLN. INFO.:   |      |          | FR 1991-15856   | A 19911220  |
|  |      |          | WO 1992-FR1193  | A 19921217  |
|  |      |          | US 1994-244735  | A3 19940609 |

OTHER SOURCE(S): MARPAT 120:31023  
 GI



AB Title compds. [I; R = XYSOmZ; R3 = H, (cyclo)alkyl, acyl; R7 = H, alkyl, alkenyl, alkynyl, etc.; R16 = H, halo, alkyl; R17 = OH, CH2OH, acyloxy; R7R17 = O, NOH, NNH2, CH2; X = CH2, arylene(oxy); Y = (O-

interrupted) (satd.) divalent C1-18 aliph. group; Z = (ar)alkyl, aryl; m = 0-2] were prepd. as antiestrogens, antiproliferatives, etc. Thus, 11.beta.-(4-hydroxyphenyl)estra-4,9-diene-3,17-dione was condensed with Cl(CH<sub>2</sub>)<sub>5</sub>Br and the product converted in 3 steps to estratrienediol II [R = C<sub>6</sub>H<sub>4</sub>[O(CH<sub>2</sub>)<sub>5</sub>Cl]-4] which was condensed with 2-pyridylmethanethiol to give, after oxidn., II [R = C<sub>6</sub>H<sub>4</sub>[O(CH<sub>2</sub>)<sub>5</sub>SOZ]-4, Z = 2-pyridylmethyl]. The latter had relative binding affinity (definition given) of 21.2 at mouse estrogen receptors in vitro.

IT 151556-15-9P 151556-16-0P 151556-41-1P  
151556-42-2P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(prepn. and reaction of, in prepn. of antiestrogen and antiproliferative)

IT 151555-16-7P 151555-25-8P 151555-26-9P  
151555-27-0P 151555-28-1P 151555-54-3P  
151555-65-6P 151555-76-9P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as antiestrogen and antiproliferative)

L8 ANSWER 9 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1992:401107 HCAPLUS

DOCUMENT NUMBER: 117:1107

TITLE: 11.beta.-Amidoalkyl estradiols, a new series of pure antiestrogens

AUTHOR(S): Claussner, A.; Nedelec, L.; Nique, F.; Philibert, D.; Teutsch, G.; Van de Velde, P.

CORPORATE SOURCE: Cent. Rech., Roussel UCLAF, Romainville, 93230, Fr.

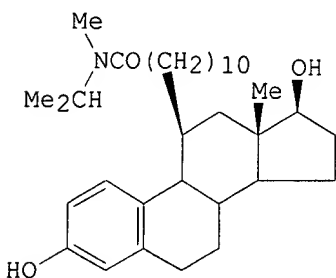
SOURCE: Journal of Steroid Biochemistry and Molecular Biology (1992), 41(3-8), 609-14

CODEN: JSBBEZ; ISSN: 0960-0760

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



I

AB In order to find new antiestrogens, devoid of any agonistic activity, a series of 11.beta.-amidoalkyl estradiols were prepd. These compds. were studied in comparison with tamoxifen (TAM): in vitro, for their relative binding affinities (RBA) for mouse and MCF-7 estrogen receptors (ER) and for their antiproliferative effect on MCF-7 (estradiol or EGF/PDGF stimulated) and Ly2 human breast cancer cell lines; in vivo, for their uterotrophic/antiuterotrophic activities in the mouse and for their antitumoral activities on MCF-7 tumors implanted in nude mice. The most representative compds. are N-methyl-N-isopropyl-(3,17.beta.-dihydroxy-estra-1,3,5(10)-trien-11.beta.-yl)-undecanamide (RU 51625) (I) and its 17.alpha.-ethynyl deriv. (RU 53637). They showed good RBAs for ER and a stronger antiproliferative effect than TAM in vitro. Unlike TAM, these compds. inhibited growth factor-stimulated MCF-7 proliferation, and the growth of the TAM-resistant cell line Ly2. In vivo, they were completely

devoid of uterotrophic activity, when given s.c. in mice, but exhibited a slight agonistic effect when administered orally. They showed interesting antitumor activities in nude mice by the percutaneous route, but RU 53637 was more potent than RU 51625 when given orally.

IT 134411-55-5P, RU 51625 134411-57-7P, RU 53637

134411-74-8P, RU 50667 134413-30-2P, RU 54485

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(prepn. and antiestrogen and antitumor activity of)

L8 ANSWER 10 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1992:214774 HCAPLUS

DOCUMENT NUMBER: 116:214774

TITLE: 19-Norsteroids having an amide-bearing chain in the 11-beta position, their preparation, their use as medicines (especially antiestrogens), and pharmaceutical compositions thereof

INVENTOR(S): Claussner, Andre; Nique, Francois; Teutsch, Jean Georges; Van de Velde, Patrick

PATENT ASSIGNEE(S): Roussel-UCLAF, Fr.

SOURCE: Eur. Pat. Appl., 63 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

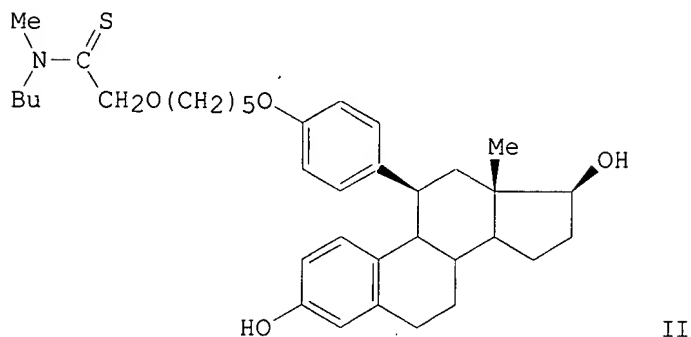
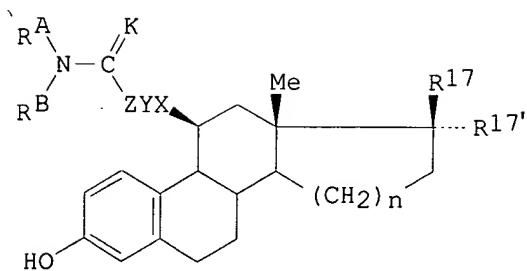
| PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|---|------|----------|-----------------|----------|
| EP 471612   | A2   | 19920219 | EP 1991-402214  | 19910809 |
| EP 471612   | A3   | 19920513 |                 |          |
| EP 471612   | B1   | 19980128 |                 |          |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE |      |          |                 |          |
| FR 2665901  | A2   | 19920221 | FR 1990-10323   | 19900814 |
| FR 2665901  | B2   | 19940729 |                 |          |
| AT 162797   | E    | 19980215 | AT 1991-402214  | 19910809 |
| ES 2112268  | T3   | 19980401 | ES 1991-402214  | 19910809 |
| CA 2049102  | AA   | 19920215 | CA 1991-2049102 | 19910813 |
| HU 59416  | A2   | 19920528 | HU 1991-2690    | 19910813 |
| JP 06340688   | A2   | 19941213 | JP 1991-226410  | 19910813 |
| JP 3073803  | B2   | 20000807 |                 |          |
| AU 9182422  | A1   | 19920220 | AU 1991-82422   | 19910814 |
| AU 644671   | B2   | 19931216 |                 |          |
| ZA 9106420  | A    | 19921028 | ZA 1991-6420    | 19910814 |
| US 5707982  | A    | 19980113 | US 1993-68735   | 19930528 |

PRIORITY APPLN. INFO.:

|                |    |          |
|----------------|----|----------|
| FR 1990-10323  | A  | 19900814 |
| FR 1989-2384   | A  | 19890224 |
| US 1990-484424 | A2 | 19900223 |
| US 1991-745289 | B1 | 19910814 |

OTHER SOURCE(S): MARPAT 116:214774

GI



AB Twenty title steroids I [either (1)  $n = 1$ ;  $K = O$ ;  $R_{17} = OH$ ,  $O_2C(CH_2)_2CO_2H$  or salts;  $R_{17}' = H$ , C.tplbond.CH;  $RA = Me$ ;  $RB = iso-Pr$ , Bu, heptafluorobutyl;  $X = CH_2$ ,  $C_6H_4$ ,  $OC_6H_4$ ;  $Y = (CH_2)_7$ ,  $(CH_2)_8$ ,  $(CH_2)_5C.tplbond.C$ ,  $(CH_2)_qOCH_2$  with  $q = 5-7$ ,  $(CH_2)_5S(O)_pCH_2$  with  $p = 0-2$ ;  $Z = bond$ ; or (2)  $n = 1$  or  $2$ ;  $K = O$ , S;  $R_{17} = OH$ , acyloxy;  $R_{17}' = H$ , (substituted) alkyl, alkenyl, or alkynyl; or  $R_{17}R_{17}' = keto$ ;  $X = CH_2$ , arylene,  $OCH_2$ , oxyarylene, thioarylene (bound to steroid at C atom);  $Y =$  aliph. chain optionally unsatd. or interrupted by arylene, O, S, SO, or  $SO_2$ ;  $Z = bond$ ;  $RA, RB = H$ , (substituted) alkyl; or  $RARB =$  atoms to form (substituted) heterocycle; addnl. restrictions] were prepd. as antiestrogens for treatment of hormone-dependent tumors. For example, 11.β-(4-hydroxyphenyl)estra-4,9-diene-3,17-dione was etherified with BuNMeCOCH<sub>2</sub>O(CH<sub>2</sub>)<sub>5</sub>Br (prepn. given), followed by isomerization to a 3-hydroxyestra-1,3,5(10)-triene, redn. of the 17-oxo group to 17.β-OH with NaBH<sub>4</sub>, protection of the OH groups as acetates, conversion of the amide to a thioamide with Lawesson's reagent, and deprotection, to give title compd. II. The IC<sub>50</sub> of II for inhibiting growth of MCF-7 mammary tumor cells in vitro was 0.03 nM. A tablet formulation comprising I is given.

IT **140712-19-2P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of, as antiestrogenic antitumor agent)

L8 ANSWER 11 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1991:656464 HCAPLUS

DOCUMENT NUMBER: 115:256464

TITLE: Preparation of 19-norsteroids containing an amide or a carboxamide group as drugs

INVENTOR(S): Claussner, Andre; Nedelec, Lucien; Philibert, Daniel; Van de Velde, Patrick

PATENT ASSIGNEE(S): Roussel-UCLAF, Fr.

SOURCE: Eur. Pat. Appl., 128 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: French

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

| PATENT NO.  | KIND | DATE     | APPLICATION NO.                        | DATE        |
|---|------|----------|--|-------------|
| EP 384842   | A1   | 19900829 | EP 1990-400493                         | 19900222    |
| EP 384842   | B1   | 19931229 |  |             |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL |      |          |  |             |
| FR 2643638  | A1   | 19900831 | FR 1989-2384                           | 19890224    |
| FR 2643638  | B1   | 19910614 |  |             |
| HU 55032  | A2   | 19910429 | HU 1990-273                            | 19900125    |
| HU 207341   | B    | 19930329 |  |             |
| ZA 9001356  | A    | 19910424 | ZA 1990-1356                           | 19900222    |
| AT 99320  | E    | 19940115 | AT 1990-400493                         | 19900222    |
| ES 2062431  | T3   | 19941216 | ES 1990-400493                         | 19900222    |
| CA 2010826  | AA   | 19900824 | CA 1990-2010826                        | 19900223    |
| AU 9050072  | A1   | 19900830 | AU 1990-50072                          | 19900223    |
| AU 631853   | B2   | 19921210 |  |             |
| JP 02268194   | A2   | 19901101 | JP 1990-41383                          | 19900223    |
| JP 3009169  | B2   | 20000214 |  |             |
| US 5149696  | A    | 19920922 | US 1990-484424                         | 19900223    |
| PL 162151   | B1   | 19930930 | PL 1990-283941                         | 19900223    |
| CN 1046166  | A    | 19901017 | CN 1990-101580                         | 19900224    |
| US 5290771  | A    | 19940301 | US 1992-875460                         | 19920429    |
| US 5707982  | A    | 19980113 | US 1993-68735                          | 19930528    |
| PRIORITY APPLN. INFO.:                                |      |          | FR 1989-2384                           | A 19890224  |
|   |      |          | EP 1990-400493                         | A 19900222  |
|   |      |          | US 1990-484424                         | A3 19900223 |
|   |      |          | FR 1990-10323                          | A 19900814  |
|   |      |          | US 1991-745289                         | B1 19910814 |
| OTHER SOURCE(S):                                      |      |          | CASREACT 115:256464; MARPAT 115:256464 |             |
| GI  |      |          |  |             |

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The title compds. [I; R, R1 = H, (substituted) alkyl; or NRR1 = (substituted) heterocyclyl; R2 = OH, acyloxy; R3 = H, (substituted) alkyl, alkenyl, alkynyl; or R2R3 = O; X = CH2, arylene, CH2O, aryleneoxy linked to the steroid moiety by C; Y = bond, (substituted) aliph. chain; Z = bond, CH2O linked to Y by C; rings A and B may be (2-substituted) Q, Q1; R4 = H, alkyl], having affinities for receptors of hormones, e.g., estrogen, androgen, progesterone, and therefore useful as inhibitors of hormone-dependent tumors and many other ailments, were prepd. Estradienone II [R5 = OH] [prepd. in several steps from epoxyestrenedione III and p-Me3CSiMe2O(CH2)8C6H4Br] was amidated with HNMeBu to give II (R5 = NMeBu), which was enol-esterified with AcBr and the product hydrolyzed to give I [R = Me, R1 = Bu, X = C6H4, Y = (CH2)7, Z = bond, R2 = OH, rings A and B = Q1, R3 = R4 = H]. This had an IC50 of 0.04 .mu.M against the growth of mammary tumor cells.

IT 134411-55-5P 134411-56-6P 134411-57-7P  
 134411-58-8P 134411-61-3P 134411-65-7P  
 134411-66-8P 134411-67-9P 134411-68-0P  
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 134413-20-0P 134413-22-2P 134413-24-4P  
 134413-25-5P 134413-28-8P 134413-29-9P  
 134413-30-2P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (prepn. of, as drug)

L8 ANSWER 12 OF 12 HCAPLUS COPYRIGHT 2003 ACS

ACCESSION NUMBER: 1981:498135 HCAPLUS

DOCUMENT NUMBER: 95:98135

TITLE: Regio and stereospecific synthesis of  
11.β.-substituted 19-norsteroids. Influence of  
11.β.-substitution on progesterone receptor  
affinity - (1)

AUTHOR(S): Belanger, A.; Philibert, D.; Teutsch, G.

CORPORATE SOURCE: Cent. Rech., Roussel-UCLAF, Romainville, 93230, Fr.

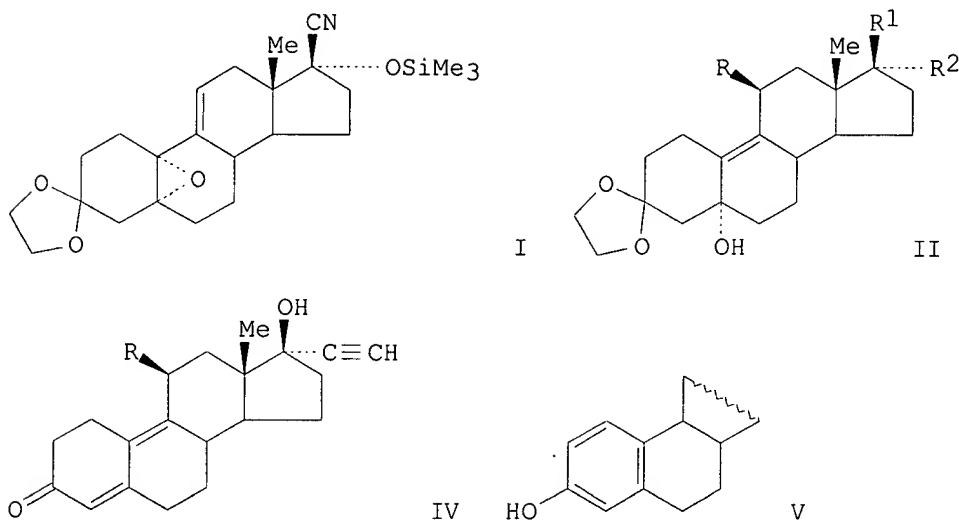
SOURCE: Steroids (1981), 37(4), 361-82

CODEN: STEDAM; ISSN: 0039-128X

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



AB Epoxyestrene I was treated with  $R_2CuLi$  ( $R$  = alkyl, aryl) or  $RMgX$  ( $X$  = halo)- $CuCl$  to give estrenols II ( $R_1$  = cyano,  $R_2$  =  $OSiMe_3$ ), which was ethynylated to norpregnenynediols II ( $R_1$  =  $OH$ ,  $R_2$  =  $C\equiv CH$ ) (III). The concomitant deketalization and dehydration of III gave norpregnadienynols IV, which were aromatized to norpregnatrienynols V. The relative affinities for the progestin and estrogen receptors showed very specific interactions between the progesterone receptor and the unsatd. substituents at C-11 of V.

IT 78793-16-5P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(prepn. of)

=&gt; fil caold

FILE 'CAOLD' ENTERED AT 16:05:32 ON 31 MAR 2003

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FILE COVERS 1907-1966

FILE LAST UPDATED: 01 May 1997 (19970501/UP)



This file contains CAS Registry Numbers for easy and accurate substance identification. Title keywords, authors, patent assignees, and patent information, e.g., patent numbers, are now searchable from 1907-1966. TIFF images of CA abstracts printed between 1907-1966 are available in the PAGE display formats.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

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=> s 17  
L9                    0 L7

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=> fil reg  
FILE 'REGISTRY' ENTERED AT 16:05:48 ON 31 MAR 2003  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 30 MAR 2003 HIGHEST RN 500991-80-0  
DICTIONARY FILE UPDATES: 30 MAR 2003 HIGHEST RN 500991-80-0

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

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| 4  | RN | 367269-91-8 | REGISTRY |
| 5  | RN | 367269-90-7 | REGISTRY |
| 6  | RN | 367269-89-4 | REGISTRY |
| 7  | RN | 367269-82-7 | REGISTRY |
| 8  | RN | 367269-81-6 | REGISTRY |
| 9  | RN | 367269-80-5 | REGISTRY |
| 10 | RN | 367269-79-2 | REGISTRY |
| 11 | RN | 367269-67-8 | REGISTRY |
| 12 | RN | 367269-66-7 | REGISTRY |
| 13 | RN | 342899-25-6 | REGISTRY |
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| 113 | RN | 134411-56-6 | REGISTRY |
| 114 | RN | 134411-55-5 | REGISTRY |
| 115 | RN | 78793-16-5  | REGISTRY |

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86 87 90 95 99 100 105 110 115

L7 ANSWER 1 OF 115 REGISTRY COPYRIGHT 2003 ACS

RN 367269-94-1 REGISTRY

CN Estra-1,3,5(10)-triene-3,17-diol, 8-ethenyl-11-hexyl-, 3-acetate,  
(11.beta.,17.beta.)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 11.beta.-Hexyl-8.beta.-vinyl-1,3,5(10)-triene-3,17.beta.-diol 3-acetate

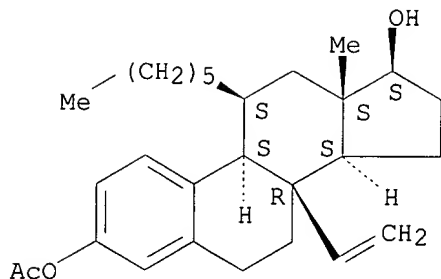
FS STEREOSEARCH

MF C28 H40 O3

SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



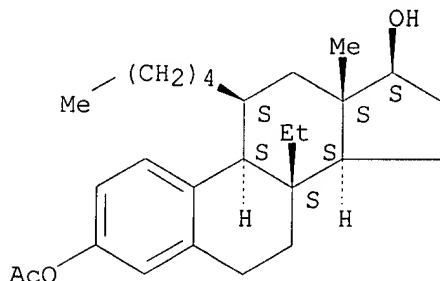
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1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 135:318607

L7 ANSWER 5 OF 115 REGISTRY COPYRIGHT 2003 ACS  
RN 367269-90-7 REGISTRY  
CN Estra-1,3,5(10)-triene-3,17-diol, 8-ethyl-11-pentyl-, 3-acetate,  
(11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN 8.beta.-Ethyl-11.beta.-pentyl-1,3,5(10)-triene-3,17.beta.-diol 3-acetate  
FS STEREOSEARCH  
MF C27 H40 O3  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

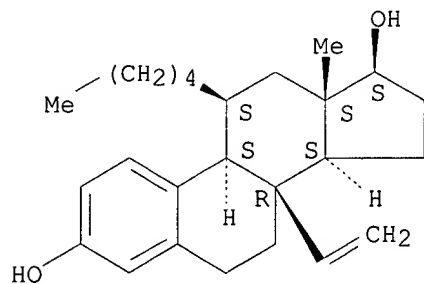
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REFERENCE 1: 135:318607

L7 ANSWER 10 OF 115 REGISTRY COPYRIGHT 2003 ACS  
RN 367269-79-2 REGISTRY  
CN Estra-1,3,5(10)-triene-3,17-diol, 8-ethenyl-11-pentyl-,  
(11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
OTHER NAMES:  
CN 11.beta.-Pentyl-8.beta.-vinylestra-1,3,5(10)-triene-3,17.beta.-diol  
FS STEREOSEARCH  
MF C25 H36 O2  
SR CA

LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



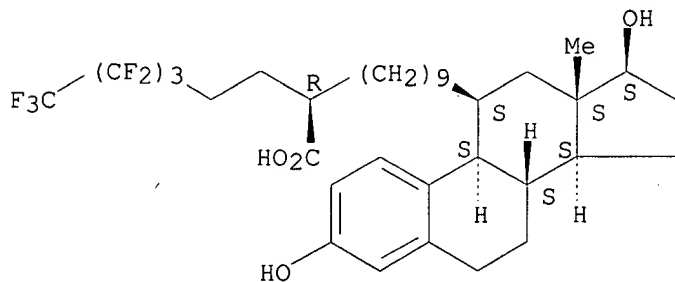
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REFERENCE 1: 135:318607

L7 ANSWER 13 OF 115 REGISTRY COPYRIGHT 2003 ACS  
RN 342899-25-6 REGISTRY  
CN Estra-1,3,5(10)-triene-11-undecanoic acid, 3,17-dihydroxy-.alpha.-(3,3,4,4,5,5,6,6,6-nonafluorohexyl)-, (.alpha.R,11.beta.,17.beta.)- (9CI)  
(CA INDEX NAME)  
FS STEREOSEARCH  
MF C35 H47 F9 O4  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

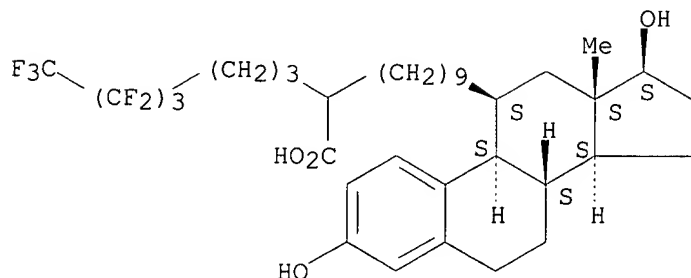
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REFERENCE 1: 135:19815

L7 ANSWER 15 OF 115 REGISTRY COPYRIGHT 2003 ACS  
RN 342899-00-7 REGISTRY  
CN Estra-1,3,5(10)-triene-11-undecanoic acid, 3,17-dihydroxy-.alpha.-(4,4,5,5,6,6,7,7,7-nonafluoroheptyl)-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C36 H49 F9 O4

SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



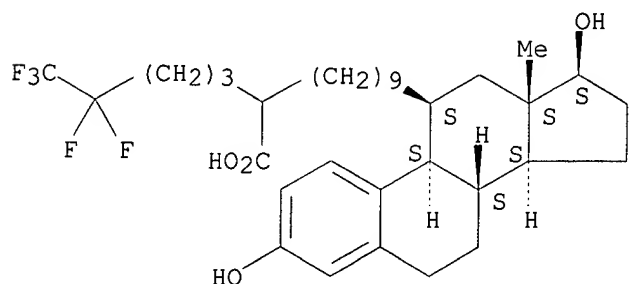
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1 REFERENCES IN FILE CA (1962 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 135:19815

L7 ANSWER 16 OF 115 REGISTRY COPYRIGHT 2003 ACS  
RN 342898-99-1 REGISTRY  
CN Estra-1,3,5(10)-triene-11-undecanoic acid, 3,17-dihydroxy-.alpha.-(4,4,5,5,5-pentafluoropentyl)-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH  
MF C34 H49 F5 O4  
SR CA  
LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

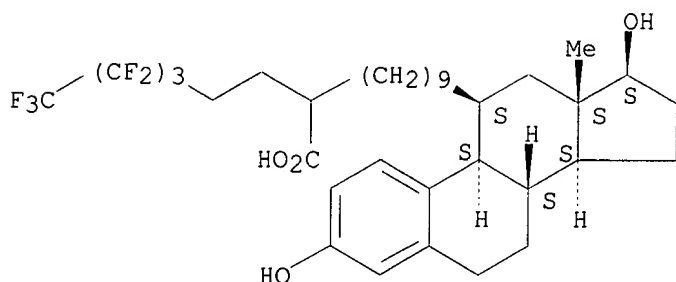
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REFERENCE 1: 135:19815

L7 ANSWER 20 OF 115 REGISTRY COPYRIGHT 2003 ACS  
RN 342898-92-4 REGISTRY  
CN Estra-1,3,5(10)-triene-11-undecanoic acid, 3,17-dihydroxy-.alpha.-(3,3,4,4,5,5,6,6,6-nonafluorohexyl)-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
FS STEREOSEARCH

MF C35 H47 F9 O4  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



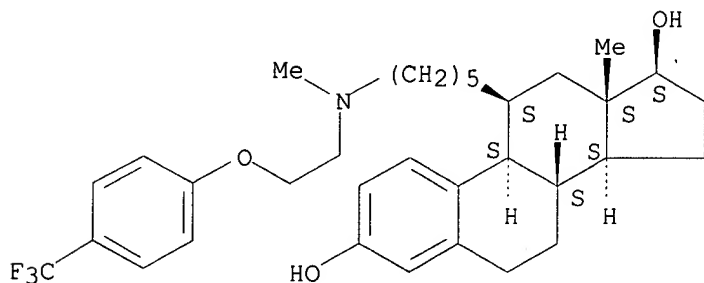
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REFERENCE 1: 135:19815

L7 ANSWER 24 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 314019-90-4 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[5-[methyl(2-[4-(trifluoromethyl)phenoxy]ethyl)amino]pentyl]-, (11.beta.,17.beta.)- (9CI)  
 (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C33 H44 F3 N O3  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



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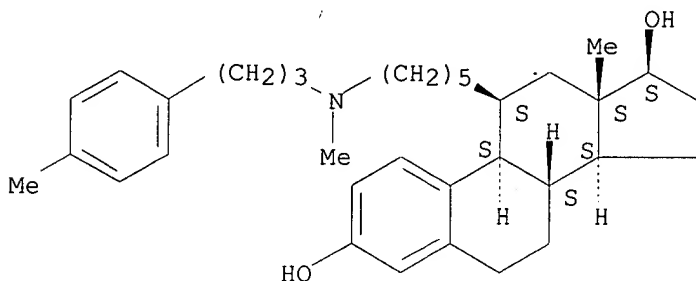
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REFERENCE 1: 134:56837

L7 ANSWER 30 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 314019-84-6 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[5-[methyl(3-(4-methylphenyl)propyl)amino]pentyl]-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH  
 MF C34 H49 N O2  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



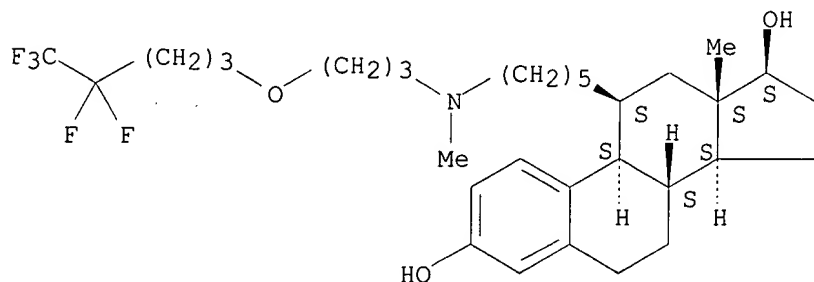
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REFERENCE 1: 134:56837

L7 ANSWER 35 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 314019-79-9 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[5-[methyl[3-[(4,4,5,5,5-pentafluoropentyl)oxy]propyl]amino]pentyl]-, (11.beta.,17.beta.)- (9CI)  
 (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C32 H48 F5 N O3  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



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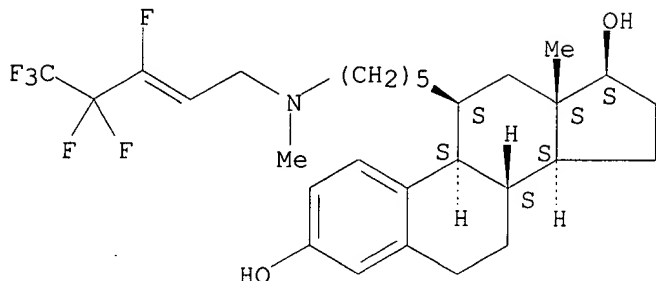
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L7 ANSWER 40 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 314019-74-4 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[5-[(3,4,4,5,5,5-hexafluoro-2-pentenyl)methylamino]pentyl]-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)



FS STEREOSEARCH  
 MF C29 H39 F6 N O2  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.  
 Double bond geometry unknown.



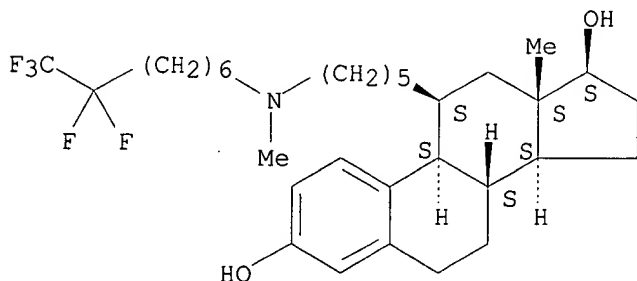
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REFERENCE 1: 134:56837

L7 ANSWER 45 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 314019-69-7 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[5-[methyl(7,7,8,8,8-pentafluorooctyl)amino]pentyl]-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C32 H48 F5 N O2  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

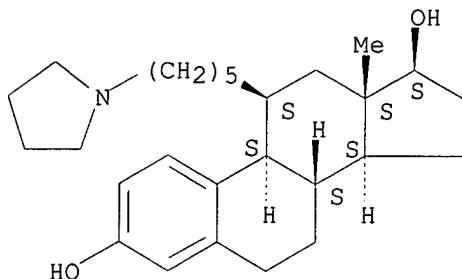
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REFERENCE 1: 134:56837

L7 ANSWER 50 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 314019-64-2 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[5-(1-pyrrolidinyl)pentyl]-,

(11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C27 H41 N O2  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



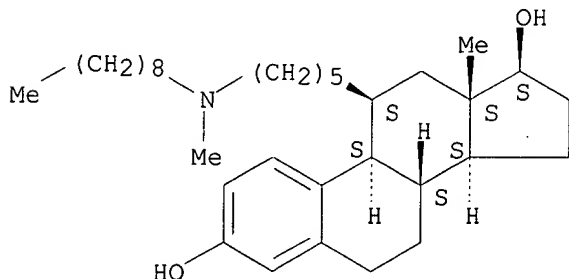
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REFERENCE 1: 134:56837

L7 ANSWER 55 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 314019-59-5 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[5-(methylnonylamino)pentyl]-,  
 (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C33 H55 N O2  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

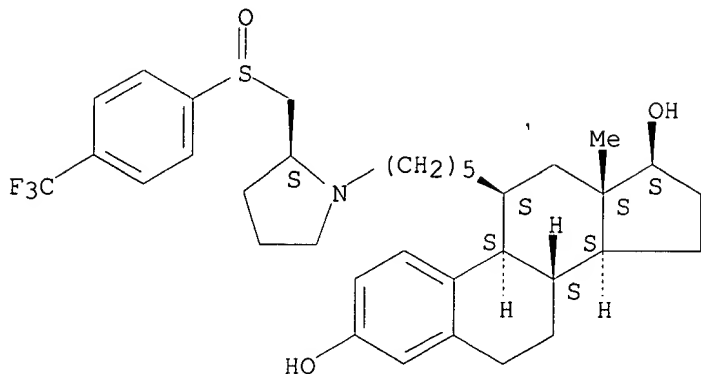
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REFERENCE 1: 134:56837

L7 ANSWER 60 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 314019-33-5 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[5-[(2S)-2-[[[4-(trifluoromethyl)phenyl]sulfinyl]methyl]-1-pyrrolidinyl]pentyl]-,

(11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
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 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



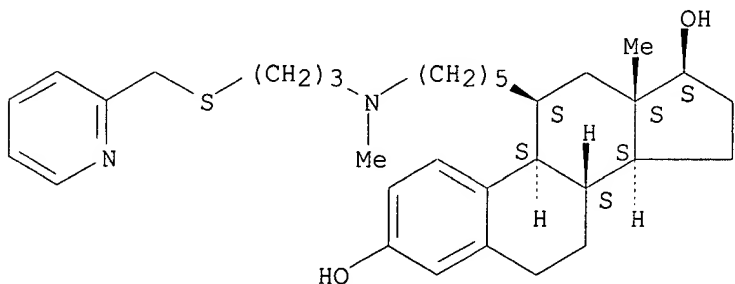
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REFERENCE 1: 134:56837

L7 ANSWER 65 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 314019-28-8 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[5-[methyl[3-[(2-pyridinylmethylthio)propyl]amino]pentyl]-, (11.beta.,17.beta.)- (9CI)  
 (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C33 H48 N2 O2 S  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry. Rotation (+).



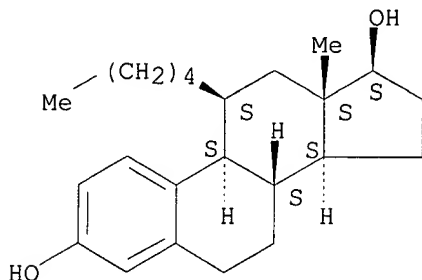
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 134:56837

L7 ANSWER 68 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 271260-12-9 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-pentyl-, (11.β.,17.β.)- (9CI)  
 (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C23 H34 O2  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



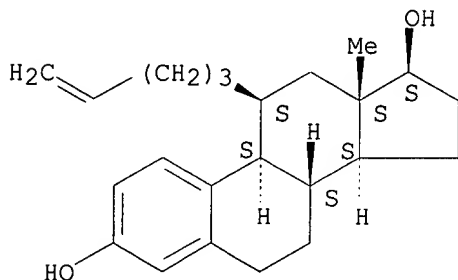
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 133:4848

L7 ANSWER 70 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 271260-07-2 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-(4-pentenyl)-, (11.β.,17.β.)-  
 (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C23 H32 O2  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

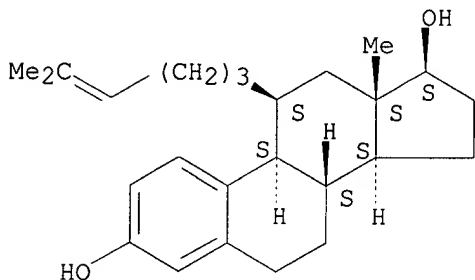
1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 133:4848

L7 ANSWER 72 OF 115 REGISTRY COPYRIGHT 2003 ACS

RN 271259-96-2 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-(5-methyl-4-hexenyl)-,  
 (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C25 H36 O2  
 SR CA  
 LC STN Files: CA, CAPLUS

Absolute stereochemistry.



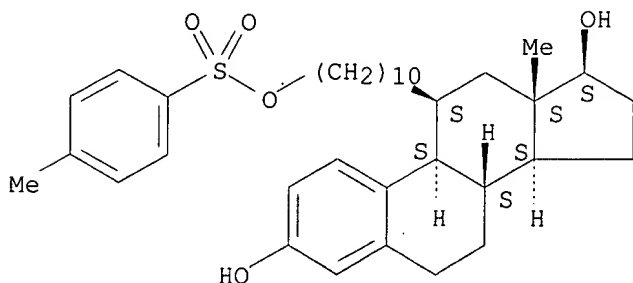
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 133:4848

L7 ANSWER 73 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 191486-92-7 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[10-[[4-methylphenyl)sulfonyl]oxy]decyl]-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C35 H50 O5 S  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

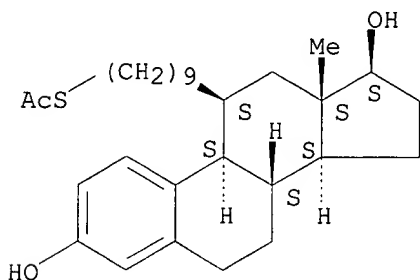
1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 127:76140

L7 ANSWER 74 OF 115 REGISTRY COPYRIGHT 2003 ACS

RN 151556-42-2 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[9-(acetylthio)nonyl]-,  
 (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C29 H44 O3 S  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



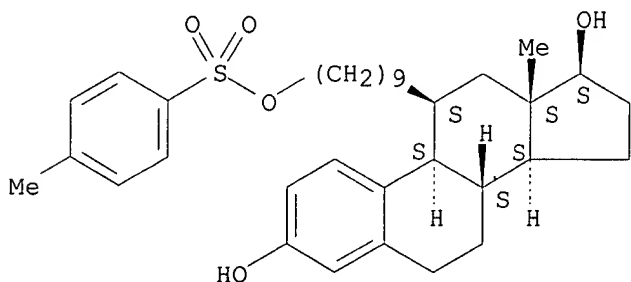
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 120:31023

L7 ANSWER 75 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 151556-41-1 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[9-[[4-methylphenyl)sulfonyl]oxy]non  
 yl]-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C34 H48 O5 S  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

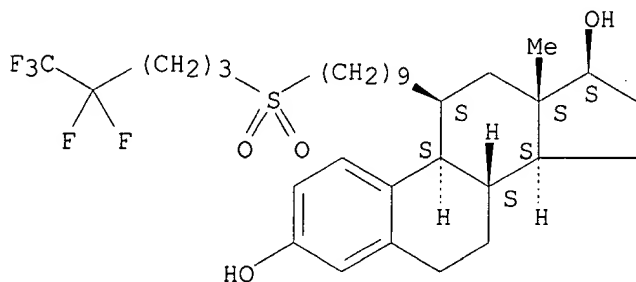
1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 120:31023

L7 ANSWER 78 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 151555-76-9 REGISTRY

CN Estra-1,3,5(10)-triene-3,17-diol, 11-[9-[(4,4,5,5,5-pentafluoropentyl)sulfonyl]nonyl]-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C32 H47 F5 O4 S  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



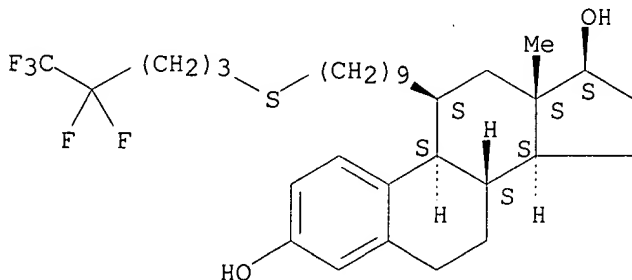
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 120:31023

L7 ANSWER 80 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 151555-54-3 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[9-[(4,4,5,5,5-pentafluoropentyl)thio]nonyl]-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C32 H47 F5 O2 S  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

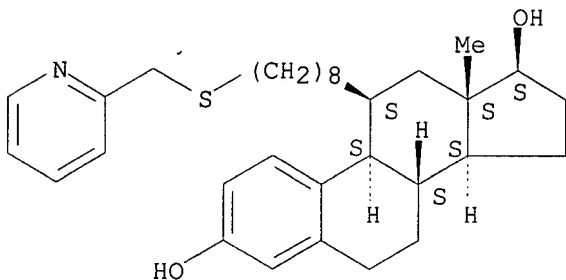
1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 120:31023

L7 ANSWER 85 OF 115 REGISTRY COPYRIGHT 2003 ACS

RN 151555-16-7 REGISTRY  
 CN Estra-1,3,5(10)-triene-3,17-diol, 11-[8-[(2-pyridinylmethyl)thio]octyl]-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C32 H45 N O2 S  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



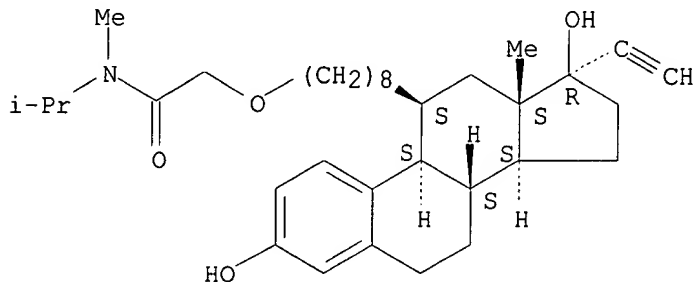
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 120:31023

L7 ANSWER 86 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 140712-19-2 REGISTRY  
 CN Acetamide, 2-[[8-[(11.beta.,17.alpha.)-3,17-dihydroxy-19-norpregna-1,3,5(10)-trien-20-yn-11-yl]octyl]oxy]-N-methyl-N-(1-methylethyl)- (9CI)  
 (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN 19-Norpregnane, acetamide deriv.  
 FS STEREOSEARCH  
 MF C34 H51 N O4  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 116:214774

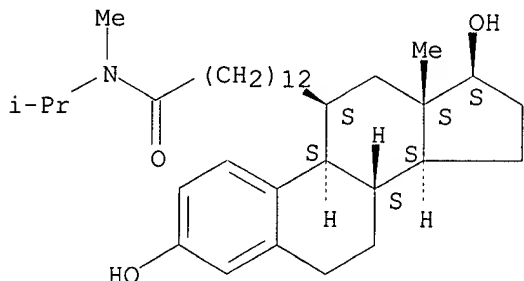


L7 ANSWER 87 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 134413-30-2 REGISTRY  
 CN Estra-1,3,5(10)-triene-11-tridecanamide, 3,17-dihydroxy-N-methyl-N-(1-methylethyl)-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)

## OTHER NAMES:

CN RU 54485  
 FS STEREOSEARCH  
 MF C35 H57 N O3  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

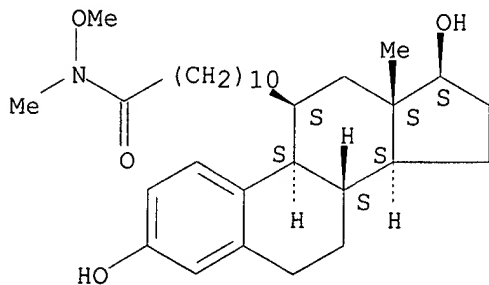
2 REFERENCES IN FILE CA (1962 TO DATE)  
 2 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 117:1107

REFERENCE 2: 115:256464

L7 ANSWER 90 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 134413-25-5 REGISTRY  
 CN Estra-1,3,5(10)-triene-11-undecanamide, 3,17-dihydroxy-N-methoxy-N-methyl-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C31 H49 N O4  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

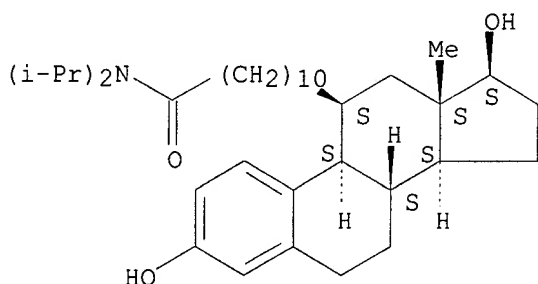
1 REFERENCES IN FILE CA (1962 TO DATE)

## 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 115:256464

L7 ANSWER 95 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 134413-18-6 REGISTRY  
 CN Estr-1,3,5(10)-triene-11-undecanamide, 3,17-dihydroxy-N,N-bis(1-methylethyl)-, (11.β.,17.β.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C35 H57 N O3  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



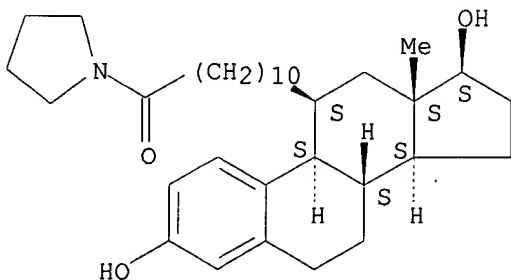
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 115:256464

L7 ANSWER 99 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 134411-83-9 REGISTRY  
 CN Pyrrolidine, 1-[11-[(11.β.,17.β.)-3,17-dihydroxyestra-1,3,5(10)-trien-11-yl]-1-oxoundecyl]- (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Estrane, pyrrolidine deriv.  
 FS STEREOSEARCH  
 MF C33 H51 N O3  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



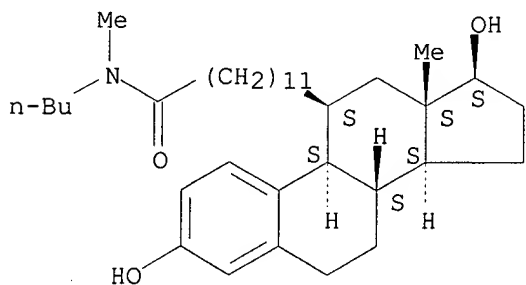
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 115:256464

L7 ANSWER 100 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 134411-81-7 REGISTRY  
 CN Estra-1,3,5(10)-triene-11-dodecanamide, N-butyl-3,17-dihydroxy-N-methyl-,  
 (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C35 H57 N O3  
 SR CA  
 LC STN Files: CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL

Absolute stereochemistry.



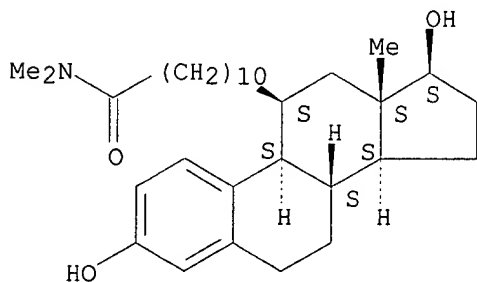
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 115:256464

L7 ANSWER 105 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 134411-71-5 REGISTRY  
 CN Estra-1,3,5(10)-triene-11-undecanamide, 3,17-dihydroxy-N,N-dimethyl-,  
 (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C31 H49 N O3  
 SR CA  
 LC STN Files: CA, CAPLUS, CASREACT, TOXCENTER, USPATFULL

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

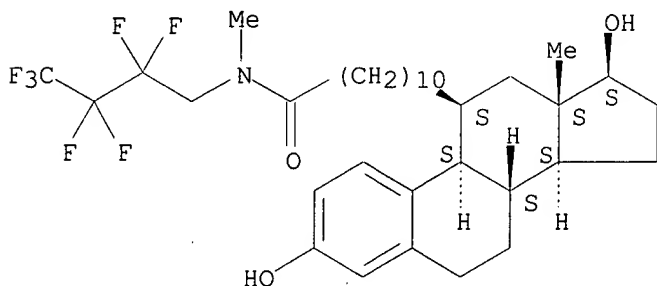
1 REFERENCES IN FILE CA (1962 TO DATE)

## 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 115:256464

L7 ANSWER 110 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 134411-61-3 REGISTRY  
 CN Estra-1,3,5(10)-triene-11-undecanamide, N-(2,2,3,3,4,4,4-heptafluorobutyl)-  
 3,17-dihydroxy-N-methyl-, (11.beta.,17.beta.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C34 H48 F7 N O3  
 SR CA  
 LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Absolute stereochemistry.



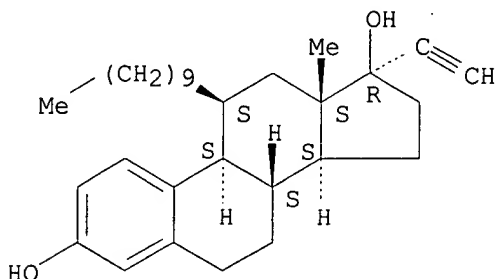
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 115:256464

L7 ANSWER 115 OF 115 REGISTRY COPYRIGHT 2003 ACS  
 RN 78793-16-5 REGISTRY  
 CN 19-Norpregna-1,3,5(10)-trien-20-yne-3,17-diol, 11-decyl-,  
 (11.beta.,17.alpha.)- (9CI) (CA INDEX NAME)  
 FS STEREOSEARCH  
 MF C30 H44 O2  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS  
 (\*File contains numerically searchable property data)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1962 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

Jiang 09\_831954

REFERENCE 1: 95:98135